

### **REMARKS**

These remarks are in response to the Office Action dated February 8, 2007. This response is filed with a request for a one month extension of time, and authorization to charge Deposit Account No. 50-0951 for the appropriate fees.

At the time of the Office Action, claims 1-7 were pending in the application. In the Office Action, claims 1-7 were rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below.

#### **I. Rejections to the claims based upon Art and Allowable Subject Matter**

Claims 1-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,676,938 to Kimura et al. ("Kimura") in view of Japanese Patent No. 02265926 to Shinji et al. ("Shinji") and further in view of European Patent No. 1116753 to Kanemaru et al. ("Kanemaru").

Claim 1 relates to a cosmetic powder constituted by a powder phase coated with silsesquioxane homopolymers and/or copolymers having an average siloxane unit of the general formula  $R^1_nSiO_{(4-n)/2}$ , where each  $R^1$  is independently chosen between a hydrogen atom and a monovalent hydrocarbon group comprising 1 to 10 carbon atoms. More than 80 mole % of  $R^1$  are hydrocarbon groups that have from 3 to 10 carbon atoms,  $n$  is a value between 1.0 and 1.4 and more than 60 mole % of the copolymer comprises  $R^1SiO_{3/2}$  units. In contrast, Kimura describes a cosmetic composition comprising a silicone resin consisting of from 80 to 95 mol % of  $R^1Si(O)_{1.5}$  units and from 5 to 20 mol % of  $(R^2)_3Si(O)_{0.5}$  units. The sum of the  $R^1Si(O)_{1.5}$  units and the  $(R^2)_3Si(O)_{0.5}$  units is 100 mol %, and the amount of residual silanol groups in said resin is 0.5 wt % or less.  $R^1$  and  $R^2$  each represents a methyl group, an ethyl group, a propyl group, a butyl group, a vinyl group, a phenyl group, or a 3,3,3-trifluoropropyl group. The resin is present in an amount of 0.1 to 45% by weight based on the weight of the cosmetic composition.

The chemical formula of the silicone resin of Kimura differs from the chemical formula of the silsesquioxane homopolymer and/or copolymer of claim 1 in that the silicone resin of Kimura does not contain hydroxyl or alkoxy functional groups. Moreover, in the cosmetic powder of claim 1, the presence of such hydroxyl or alkoxy functional groups is essential in order to allow the networking and the hooking of the silsesquioxane coating phase onto the surface of the powders as stated in the present application on page 4, lines 5-6. Furthermore, the presence of said hydroxyl

Reply to Office Action dated February 8, 2007

or alkoxy functional groups in the silsesquioxane coating phase of claim 1 leads to said coating phase the technical effect of allowing to coat the powder and the pigments by creating a thin (film), with physical properties which mirror the properties of the coating, i.e. flexibility, elasticity, film softness which does not crack (present application, page 5, lines 29-30, page 6 lines 1 ,2). Moreover, the hydroxyl or alkoxy functional groups further allows the hooking of the cosmetic powder of the present application on complementary structure of the skin surface (i.e. derma) on which the cosmetic powder is applied thus making the cosmetic powder of the present application flexible to the movements of the derma itself. Due to the above mentioned technical effects a dry skin feel is also perceived (present application, page 6, lines 8-9).

Furthermore, in Kimura, the presence of powdery materials is not essential. Kimura clearly teaches that powdery materials “may” be added to the cosmetic composition (Kimura, col. 6, lines 28-30). Moreover, the silicon resin of Kimura does not coat such powdery material. In the “composition table” of Example 13, in which powders are present in the composition, it is evident that the silicon resin does not coat the powders, and instead is simply mixed with them (Kimura, Example 13, composition table, col. 15, lines 45-55).

Regarding Shinji, the abstract relates to a siloxane derivative comprising a siloxane skeleton and a hydrophilic alkyl skeleton with hydroxyl group and ether oxygen. The derivative of Shinji is a siloxane, and not a silsesquioxane set forth in claim 1. Furthermore, no mention is made by Shinji that siloxane derivative coats a powder phase. To the contrary, the powder phase and the silsesquioxane polymer are both essential elements of the cosmetic powder of claim 1.

Kanemaru describes a silicone treated powder composed of a powder coated on the surface thereof with a silicone compound, in which an amount of hydrogen generated by Si-H groups remained on the surface of the silicone-treated powder is not more than 0.2 ml/g of treated powder and a contact angle of water with the treated powder is at least 100°. In Kanemaru, the powder treated with silicone is obtained by polymerizing silicone monomers of general formula



where  $R^1$ ,  $R^2$  and  $R^3$  independently represent a hydrogen atom or a  $C_1$  to  $C_{10}$  hydrocarbon group, which may be substituted with at least one halogen atom, provided that  $R^1$ ,  $R^2$  and  $R^3$  are not simultaneously hydrogen atoms,  $R^4$ ,  $R^5$  and  $R^6$  independently represent a hydrogen atom or a  $C_1$  to  $C_{10}$  hydrocarbon group, which may be substituted with at least one halogen atom, a

Reply to Office Action dated February 8, 2007

is an integer of 1 or more, b is 0 or an integer of 1 or more, c is 0 or 2, provided that  $3 \leq a+b+c \leq 10000$  (Kanemaru, page 3, lines 55-56, page 4, lines 1-10). Thus, in Kanemaru, the monomers are polymerized *in situ*, (i.e. directly on the surface of the various powder by a heat treatment). In contrast, in claim 1 the powder phase is individually coated by a still preformed silsesquioxane polymer having the specific chemical formula set forth above.

Therefore, in claim 1, the powder is individually impregnated by spraying the above silsesquioxane polymer previously prepared by mixing it with a suitable solvent (present invention, page 4, lines 21-25). Furthermore, no mention has been made by Kanemaru of the presence of hydroxyl or alkoxy functional groups in the polymer obtained by the heat treatment process of Kanemaru.

It should be noted that the problem the present invention deals with is that of providing a cosmetic powder wherein the powder is coated by a coating phase that allows to coat the powder and the pigments by creating a thin layer (film) with physical properties which mirror the properties of the coating, i.e. flexibility, elasticity, film softness which does not crack (present application, page 5, lines 29-30, page 6, lines 1-2). In such a manner, the contact between the powder and the skin surface is also prevented, avoiding dehydration effects and meanwhile generating a good sensory effect (present application, page 2, lines 12-15).

The above problem is solved by selecting a specific silsesquioxane polymer for the coating phase containing hydroxyl or alkoxy functional groups. The specific polymers are set out in claim 1.

The only cited prior art document that describes a cosmetic composition system which contains both a powder phase and a coating phase of said powder phase is Kanemaru (see discussion above). However, the coating phase polymer obtained by the polymerization heat treatment process of Kanemaru is not suitable to solve the problem of the present application. Indeed, as clearly described by Kanemaru, the polymerization heating process of the monomers of formula  $(R^1HSiO)_a(R^2R^3SiO)_b(R^4R^5R^6SiO_{1/2})_c$ , wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$  and  $R^6$  have the meaning stated above, leads to a polymer that does not contain hydroxyl or alkoxy functional groups. Moreover, the *in situ* polymerization process of Kanemaru leads to a cosmetic composition that contains  $H_2$  on the surface of the silicon treated powder. The presence of  $H_2$  on the surface of the silicon treated powder has the disadvantage that the cosmetic container may

swell with the elapse of time after filling the product into containers, and the product may harden and crack.

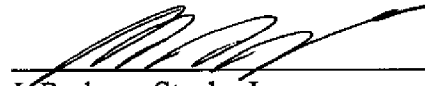
A skilled person faced with the problem of providing a cosmetic powder in which the powder is coated by a coating phase that allows to coat the powder and the pigments by creating a thin layer with physical properties which mirror the properties of the coating would not find any teaching or suggestion in the cited prior art which would prompt the modification of the chemical structure of the compounds described in the cited prior art in order to select the specific silsesquioxane polymer for the coating phase for a powder phase set forth in claim 1 of the present application. For the reasons stated above, applicants believe that the cosmetic powder of the present invention and the effects thereof are new and not suggested by the cited prior art documents. Prompt issuance of a Notice of Allowance is thus respectfully requested.

## **II. Conclusion**

Applicants have made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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